

**Substitute Specification – Redline Format**

**THREAT LAUNCH DETECTION SYSTEM AND METHOD**

**ABSTRACT**

A threat launch detection system includes at least one temporal threat detector, each temporal threat detector including a single sensing element operable to sense radiation from various types of short-burn threats that occur within a field of view of the detector. The single sensing element generates a detection signal in response to the sensed radiation. A processing circuit is coupled to each temporal threat detector and is operable to analyze the detection signal from each detector as a function of time to detect the occurrence of a short-burn threat within the field of view of any of the temporal threat detectors. Each temporal threat detector may be a prism-coupled compound parabolic concentrator (PCCP).